

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejection present in the outstanding Office Action in light of the following remarks.

Claims 1-43 were pending in the instant application at the time of the outstanding Office Action. Of these claims, Claims 1, 23, and 43 are independent claims; the remaining claims are dependent claims. Claims 1-43 stand rejected. Claims 1-43 stand rejected under Section 102(b).

Applicants previously submitted remarks remain equally applicable here and are therefore incorporated by reference herein. Moreover, it should be noted that the amendments submitted herewith are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution, and that Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim. Applicants respectfully reserve their right to pursue these and other claims in one or more continuation and/or divisional applications.

Section 102(b) Rejections

Claims 1-43 stand rejected under 35 USC § 102(b) as being anticipated by U.S. Patent No. 6,523,141 to Cantrill (hereinafter “Cantrill”). Applicants respectfully request reconsideration and withdrawal of this rejection.

Applicants respectfully submit that the applied art does not anticipate the present invention because, at the very least, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under construction.” *W.L. Gore & Associates, Inc. v. Garlock*, 721 F.2d 1540, 1554 (Fed. Cir. 1983); *see also In re Marshall*, 198 U.S.P.Q. 344, 346 (C.C.P.A. 1978).

As best understood, the teachings of Cantrill stand in stark contrast to the instantly claimed invention. Cantrill teaches methods and apparatus for detecting and reporting *memory leaks* associated with an operating system. *Cantrill*, Abstract. Among other deficiencies, Cantrill, as best understood, does not teach automatic crash recovery at all. Cantrill uses post-crash analysis to locate the cause of a memory leak and report on it. *Cantrill*, Col. 2, lines 51-65. Cantrill does not teach returning the crashed machine to production automatically. Moreover, Cantrill does not teach automatic detection of the crash or the abnormal termination of the operating system or drivers. Nor does Cantrill teach the interception of a call to an operating system halting routine or exception handler. Cantrill merely teaches determining that a memory corruption has occurred. *Id.* From there, Cantrill teaches associating the corruption with a piece of software and reporting on it. *Id.* at Col. 3, lines 1-13.

In stark contrast to Cantrill, a non-limiting, exemplary embodiment of the instantly claimed invention provides a “method for automatic crash recovery...” *Specification*, pp. 8, line 12. “The crash event **380**, in an exemplary embodiment, relates to the aforementioned interception of the crash function(s).” *Id* at lines 14-15. “Analysis **320** involves probing the kernel **110**, device drivers **140**, and the hardware to determine the state of the machine at the time of the crash event **380**...[]...After as much data as possible can be gathered from the crashed machine, the cause of the crash is determined **330**.” *Id* at pp. 9, lines 1-10. “After determining the cause **330** of the fault, one or more solutions or fixes should be obtained **340**. In an exemplary embodiment of the present invention, the solutions or fixes can be downloaded **411**, **412**, from a remote Download Server **510**...” *Id* at pp. 10, lines 12-14. “Once the download of one or more solutions **340** to the fault is complete or the solution is located in a cache of fixes on the Crashed Computer **410**, then the solutions are applied or installed **350**.” *Id* at pp. 11, lines 5-7.

Applicants have amended the independent claims to clarify that it an automatic crash recovery scheme that is the focus of the instant invention. The independent claims now recite, *inter alia*, “providing automatic recovery from operating system faults, said providing automatic recovery further comprising: detecting an operating system fault; analyzing the operating system fault; determining a cause of the operating system fault; determining a solution; and applying a solution.” Claim 1, (emphasis added). Applicants respectfully submit that “providing automatic recovery from operating system faults” clearly indicated, in light of the specification and the preamble of the original claims, that it is an automated system for detecting a multitude of operating system faults and

providing, when appropriate, automatic recovery. The amendments are submitted to more clearly indicate automated nature of crash recovery is the subject matter of the claims solely in order to facilitate expeditious prosecution of this application. Applicants respectfully submit that Cantrill clearly falls short of the instantly claimed invention and therefore respectfully request reconsideration and withdrawal of these rejections.

Amendments to Dependent Claims 17 and 37

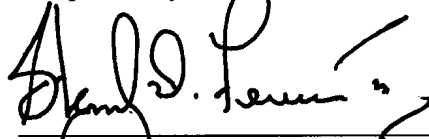
Applicants also wish to note that dependent claims 17 and 37 have been amended herewith solely to expedite prosecution of the application. Claim 17 now recites “[t]he method according to Claim 1, wherein said step of applying a solution comprises effecting one or more changes or updates in at least one of: device driver software and firmware; wherein said solution is automatically downloaded and installed.” Claim 37 contains similar language. These claims, aside from depending from what are believed to be allowable independent claims, further distinguish from Cantrill and the art of record. Support for these claim amendments can be found throughout the original specification, particularly at pp. 10, line 12-pp. 11, line 7.

Conclusion

In view of the foregoing, it is respectfully submitted that independent Claims 1, 23, and 43 fully distinguish over the applied art and are thus allowable. By virtue of dependence from Claims 1 and 23 it is thus also submitted that Claims 2-22 and 24-42 are also allowable at this juncture.

In summary, it is respectfully submitted that the instant application, including Claims 1-43, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. **If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.**

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stanley D. Ference III", written over a horizontal line.

Stanley D. Ference III
Registration No. 33,879

Customer No. 58127
FERENCE & ASSOCIATES LLC
409 Broad Street
Pittsburgh, Pennsylvania 15143
(412) 741-8400
(412) 741-9292 - Facsimile

Attorneys for Applicants